

ABSTRACT

An up conversion mixer has a Gilbert cell arrangement including an input amplification part for producing an amplified signal coupled to a multiplication part, the multiplication part being arranged to multiply the amplified signal by a local oscillator
5 signal and output a mixed signal, the mixer also having a capacitor coupled from a node between the input amplification part and the multiplication part, to a power supply line, for suppressing unwanted high frequency signal components of the output signal of the multiplication part. The linearity of such mixers can be improved considerably by this impedance on the source node of the switch transistors. This capacitance can be placed to
10 either VSS or to VDD. Notably this improvement can be achieved with low power consumption since no additional power is needed for the increased performance.